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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,812	03/31/2004	Mark E. Pecen	CS90104	7551
20280 7590 10/05/2007 MOTOROLA INC 600 NORTH US HIGHWAY 45 W4 - 39Q LIBERTYVILLE, IL 60048-5343			EXAMINER NGUYEN, KHAI N	
			ART UNIT 2614	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/813,812	Applicant(s) PECEN ET AL.	
	Examiner Khai N. Nguyen	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>September 02, 2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on September 02, 2005 was filed after the filing date of the instant application on March 31, 2004. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Abstract

2. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

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The abstract of this instant application contains many designation item numbers referred to multiple figures which are described the detail design of the apparatus and method flow chart. Appropriate correction action is required.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

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be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 7,136,641.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claim 1 of the instant application is broader in scope than the claim 1 of the patent 7,136, 641 (claims 3-4, and 13-14 of the instant application have identical claimed words with the claims 6, and 14-15 of the patent '641). Omission of an element and its function in a combination is an obvious expedient if the remaining elements perform the same functions as before. In re KARLSON (CCPA) 136 USPQQ 184 (1963).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claims 1-7, 9-10, 12-15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kalavade et al. (U.S. Publication Number 2002/0191575 A1).

Regarding claim 1, Kalavade et al. teach a method in a communication system for selecting a routing area for establishing communication between a primary communication network having a primary routing area and a communication device through a secondary communication network (**Fig. 4 – 60 “GPRS cells”, 62 “Routing Area” – paragraph [0062] lines 1-3**), the communication device supporting a cellular core network signaling protocol of the primary communication network and having a primary identification (**Fig. 4 – 54 “Converged Wireless Gateway” – paragraph [0063], and [0067]**), the method comprising:

creating a plurality of secondary routing areas (**Fig. 4 – 60 “Cell area”, paragraph [0062] line 2**), each of the plurality of secondary routing areas comprising at least one of a plurality of secondary communication networks (**paragraph [0054], i.e., wireless LAN “secondary communication networks”**), each of the plurality of secondary communication networks capable of providing a communication coverage for the communication device (**paragraph [0067] lines 1-4**);

detecting a presence of the communication device through a particular secondary communication network of the plurality of secondary communication networks (**paragraph [0068], i.e., detects the presence by periodically broadcast beacons**);

determining a target routing area of the plurality of secondary routing areas, the target routing area having the particular secondary communication network (**paragraph [0069], lines 1-3, i.e., go out of the network “target routing area”**); and

re-directing services originally directed to the primary identification of the communication device in the primary communication network to the target routing area by the primary communication network (**paragraph [0071], i.e., the GPRS network “primary communication network”**).

Regarding claim 2, Kalavade et al. teach a method wherein creating a plurality of secondary routing areas includes:

assigning the plurality of secondary routing areas to an alternative network controller, the alternative network controller capable of establishing communication between the primary communication network and the communication device in the target routing area through the alternative network controller (**Fig. 4 – 54 Converged Wireless Gateway (CWG) “alternative network controller”, paragraph [0053], and paragraph [0073]**).

Regarding claim 3, Kalavade et al. teach a method wherein establishing communication between the primary communication network and the communication device in the target routing through the alternative network controller by the alternative network controller (**Fig. 7 – 54 CWG, paragraph [0084]**) includes:

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converting a protocol of the secondary communication network into the cellular core network signaling protocol of the primary communication network; and

converting the cellular core network signaling protocol of the primary communication network into the protocol of the secondary communication network

(Figs. 7-8 paragraph [0084], and paragraph [0087]).

Regarding claim 4, Kalavade et al. teach a method wherein establishing communication between the primary communication network and the communication device in the target routing through the alternative network controller by the alternative network controller includes:

setting up a tunnel between the communication device and the alternative network controller; and

controlling the tunnel **(Fig. 11, paragraph [0093], i.e., tunnel and de-tunnel packets to the CWG “alternate network controller”).**

Regarding claim 5, Kalavade et al. teach a method wherein detecting a presence of the communication device through a particular secondary communication network of the plurality of secondary communication networks includes:

receiving a request from the communication device to access a particular secondary communication network of the plurality of secondary communication network by the particular secondary communication network of the plurality of secondary communication networks **(Fig. 7 – 10 Mobile Stations of Hotspot 1 “secondary**

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communication network” and Hotspot 2 “other secondary communication network”, paragraph [0084];

assigning a secondary identification to the communication device in response to receiving the request (**paragraph [0086] lines 1-4, i.e., IMSI for GPRS network**); and

authorizing the communication device to access the particular secondary communication network of the plurality of secondary communication networks (**paragraph [0086] lines 5-6, i.e., CWG “alternative network controller” maintain the access**).

Regarding claim 6, Kalavade et al. teach a method wherein determining a target routing area of the plurality of secondary routing areas, the target routing area having the particular secondary communication network includes:

receiving a secondary routing area identification of the target routing area by the primary communication network (**Fig. 10 – paragraph [0088], lines 2-3, i.e., IMSI**); and

receiving the secondary identification of the communication device by the primary communication network (**Fig. 10 – paragraph [0088], lines 3-4, i.e., IP address**).

Regarding claim 7, Kalavade et al. teach a method of re-directing services originally directed to the primary identification of the communication device in the primary communication network to the target routing area by the primary communication network includes:

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associating the primary identification of the communication device with the secondary identification of the communication device by the primary communication network (**paragraphs [0069]-[0070], i.e., 802.11 device with user's identification (e.g., IP address)**); and

re-directing the services originally directed to the primary identification of the communication device to the secondary routing area identification of the target routing area (**paragraph [0071], i.e., the GPRS network "primary communication network"**).

Regarding claim 9, Kalavade et al. teach a method wherein determining a target routing area of the plurality of secondary routing areas, the target routing area having the particular secondary communication network further comprises:

determining by the alternative network controller a secondary routing area identification of a proximate target routing area proximate to the target routing area based upon the secondary routing area identification of the target routing area (**Fig. 4 - paragraph [0064], i.e., CWG "alternative network controller" will be associated with a few hotspots "secondary routing area" based on geographic proximity**).

Regarding claim 10, Kalavade et al. teach a method of re-directing services originally directed to the primary identification of the communication device in the primary communication network to the target routing area by the primary communication network includes:

associating the primary identification of the communication device with the secondary identification of the communication device by the primary communication network (**Fig. 4 - paragraphs [0069]-[0070], i.e., 802.11 device with user's identification (e.g., IP address)**); and

re-directing the services originally directed to the primary identification of the communication device to the secondary routing area identification of the target routing area and to the secondary routing area identification of the proximate target routing area (**Fig. 4 - paragraph [0071], i.e., the GPRS network "primary communication network"**).

Regarding claim 12, Kalavade et al. teach a communication system configured to select an appropriate routing area (**Figs. 1-2, Fig. 4**), the communication system comprising:

a primary communication network configured to support a primary cellular core network signaling protocol, the primary communication network having a primary routing area (**Fig. 2, Fig. 4 – 18 SGSN (Serving GPRS Service Node) – 62 Routing Area, paragraph [0062]**);

an alternative network controller coupled to the primary communication network, the alternative network controller configured to communicate with the primary communication network using the primary cellular core network signaling protocol (**Fig. 4 – 54 CWG "alternative network controller", paragraph [0063] lines 1-2, Figs. 7-8, paragraph [0084] lines 1-2, and paragraph [0087] lines 1-2**);

a plurality of secondary communication networks coupled to the alternative network controller, each of the plurality of secondary communication networks configured to support a secondary communication network protocol, the plurality of secondary communication networks grouped into a plurality of secondary routing areas, each of the plurality of secondary routing areas comprising at least one of the plurality of secondary communication networks (**Fig. 4 – 60 – 802.11 Cell “secondary communication network” – Cell Area 1-3 “secondary routing areas” – 802.11 “secondary communication network protocol” – Fig. 4 – 54 CWG “alternative network controller” - paragraphs [0062]-[0063]**);

a communication device coupled to a particular secondary communication network of the plurality of secondary communication networks, the communication device having a primary identification and configured to support the primary cellular core network signaling protocol and the secondary communication network protocol (**Fig. 4 – 802.11 device “communication device”, paragraph [0067] - paragraph [0086], i.e., network signaling protocols**); and

a routing area selector coupled to the alternative network controller, the routing area selector configured to identify a target routing area having the particular secondary communication network (**Fig. 4 – 18 SGSN “routing area selector” – 54 CWG “alternative network controller” – 62 Routing Area 1-3, paragraphs [0062]-[0063]**),

wherein the alternative network controller is further configured to direct services initially directed to the primary identification of the communication device to the target routing area and to establish communication between the primary communication

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network and the communication device through the alternative network controller (**Fig. 4 – 54 Converged Wireless Gateway (CWG) “alternative network controller”**; paragraph [0053], and paragraph [0073]).

Regarding claim 13, Kalavade et al. teach the communication system wherein the alternative network controller further comprises a protocol converter configured to convert the primary cellular communication core network signaling protocol into the secondary communication network protocol, and to convert the secondary communication network protocol into the primary cellular core network signaling protocols (**Figs. 7-8 – 54 CWG “alternative network controller”, paragraph [0084], and paragraph [0087]**).

Regarding claim 14, Kalavade et al. teach the communication system wherein the alternative network controller further comprises a tunnel controller configured to set up, maintain, and control a tunnel between the communication device and the alternative network controller (**Fig. 11 – 74 Client Software “tunnel controller”, paragraph [0093], i.e., tunnel and de-tunnel packets to the CWG “alternate network controller” and paragraph [0094]**).

Regarding claim 15, Kalavade et al. teach the communication system wherein the routing area selector is further configured to identify available secondary communication networks associated with the target routing area (**Fig. 4 – 18 SGSN**

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“routing area selector” – 54 CWG “alternative network controller” – 62 Routing Area 1-3, paragraphs [0062]-[0063]).

Regarding claim 17, Kalavade et al. teach the communication system of claim 15, wherein the routing area selector is further configured to determine a proximate target routing area proximate to the target routing area and to further identify available secondary communication networks associated with the proximate target routing area (Fig. 4 – 18 SGSN “routing area selector” – 54 CWG “alternative network controller” – 62 Routing Area 1-3, paragraphs [0064], i.e., geographic proximity).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8, 11, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalavade et al. (U.S. Publication Number 2002/0191575 A1), and further in view of Bryson (U.S. Publication Number 2004/0185777 A1).

Regarding claims 8, 11, 16, and 18, Kalavade et al. disclose everything claimed as applied above (see claims 7, 10, 15, and 17). However, Kalavade et al. fail to

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include the pagers as one of the communication device in their method and system (i.e. to page the communication device). Although Kalavade et al. teach the mobile stations (MS) which are described as wireless client device (such as, e.g., laptops, cell phones or PDA with a GPRS NIC (Network Interface Card)) (**Kalavade et al. – Fig. 1 – 10 MS, paragraph [0047] lines 1-6**).

In the same field of endeavor, Byron teaches the method and system associated with a plurality of user devices that can be routed from a first routing area to a second routing area (**Byron – Fig. 11, paragraph [0104]**), and this plurality of user devices have the pagers include means for wireless applications (e.g., to page the communication device) (**Byron – paragraph [0002]**). The advantage of Byron is extending the range of the user devices without increasing the radiated power and thus reducing the user exposure to radiated energy and alleviating concerns of regulatory agencies (e.g., EMI, CE, and UL) (**Byron – paragraph [0009] lines 5-11**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Kalavade et al. with the pagers to be used with the paging application.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Baker et al. (U.S. Patent 6,795,701) teach a method and system for multiple wireless standard protocols to be used in a single wireless network with many routing areas.

Verma et al. (U.S. Publication 2006/0050667 A1) teach method for supporting an internetworking between a WLAN and a mobile communication network.

Annic (U.S. Publication 2006/0013157 A1) teaches a system to provide access to a mobile terminal from a plurality of independent communication networks.

Lewis et al. (U.S. Publication 2006/0018283 A1) teach the use of a wireless router for exchanging data between the host services and mobile devices.


Dorsey et al. (U.S. Publication 2005/0090224 A1) teach a method for placing emergency calls within a plurality of routing areas.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai N. Nguyen whose telephone number is (571) 270-3141. The examiner can normally be reached on Monday - Thursday 6:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


KNN
9/18/2007

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